

# Installation Instructions

## HMMWV Gunner Restraint (Single Lower with Swivel – M1151)

July 28, 2006  
Revision: A



<b>APPLICATION</b>		<b>CONTRACTOR</b> SCHROTH SAFETY PRODUCTS		SCHROTH SAFETY PRODUCTS 1371 S.W. 8 <sup>TH</sup> STREET, UNIT 8-A POMPANO BEACH, FL 33069	
KIT P/N	USED ON			<b>INSTALLATION INSTRUCTIONS, KIT, HMMWV GUNNER RESRAINT (SINGLE LOWER W/SWIVEL –M1151)</b>	
902-US-07301	HMMWV M1151	DRAWN BY Daryl Soderman	DATE (Y-M-D) 6/28/2006	<b>CAGE CODE</b> <b>1EAW9</b>	<b>EN2006-6</b>
		APPRV'D			
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## INSTALLATION KITS: Kit P/N: 902-US-07301

KIT P/N: 902-US-07301 (HMMWV Restraint Kit, Gunner, Single Lower with Swivel – M1151) contains the following items:

1.1 Kit P/N: 902-US-07301 contains the following items:

Item No.	Part Number	Name	Qty
1	900-US-07301	Harness Assembly, Gunner HMMWV (with Swivel)	1
2	901-US-07301-3	Turret Bracket Kit, Sling Hook Side, Gunner HMMWV	1
3	901-US-07301-4	Turret Bracket Kit, Sling Webbing Side, Gunner HMMWV	1
4	901-US-07301-5	Lower Adaptor Plate Kit, Gunner HMMWV, M1151	1
5	901-US-07301-6	Lower Retractor Kit, Gunner HMMWV, M1151	1
6	EN2006-6	Installation Instructions, Gunner HMMWV – M1151	1

1.1.1 Kit P/N: 901-US-07301-3 contains the following items:

Item No.	Part Number	Name	Qty
1	DTA183640	Bracket, Hook Side	1
2	DTA183642	Bracket, Adapter	1
3	F-B38X24-1.5G8	Bolt, Hex, 3/8-24x1.5	1
4	F-B716X14-1.25G8	Bolt, Hex, 7/16-14x1-1/4	1
5	F-N14X20-CL	Nut, 1/4-20	1
6	F-N716X14-CL	Nut, 7/16-14	1
7	F-S14X20-1	Screw, Socketcap, 1/4-20x1	1
8	F-W14HS-G8	Washer, 1/4"	2
9	F-W38HS-G8	Washer, 3/8	1
10	F-W716HS-G8	Washer, 7/16	2

1.1.2 Kit P/N: 901-US-07301-4 contains the following items:

Item No.	Part Number	Name	Qty
1	DTA183641	Bracket, Webbing Side	1
2	DTA183642	Bracket, Adapter	1
3	F-B38X24-1.25G8	Bolt, Hex, 3/8-24x1.25	1
4	F-B716X14-1.25G8	Bolt, Hex, 7/16-14x1-1/4	1
5	F-N14X20-CL	Nut, 1/4-20	1
6	F-N716X14-CL	Nut, 7/16-14	1
7	F-S14X20-1	Screw, Socketcap, 1/4-20x1	1
8	F-W14HS-G8	Washer, 1/4"	2
9	F-W38HS-G8	Washer, 3/8	1
10	F-W716HS-G8	Washer, 7/16	2

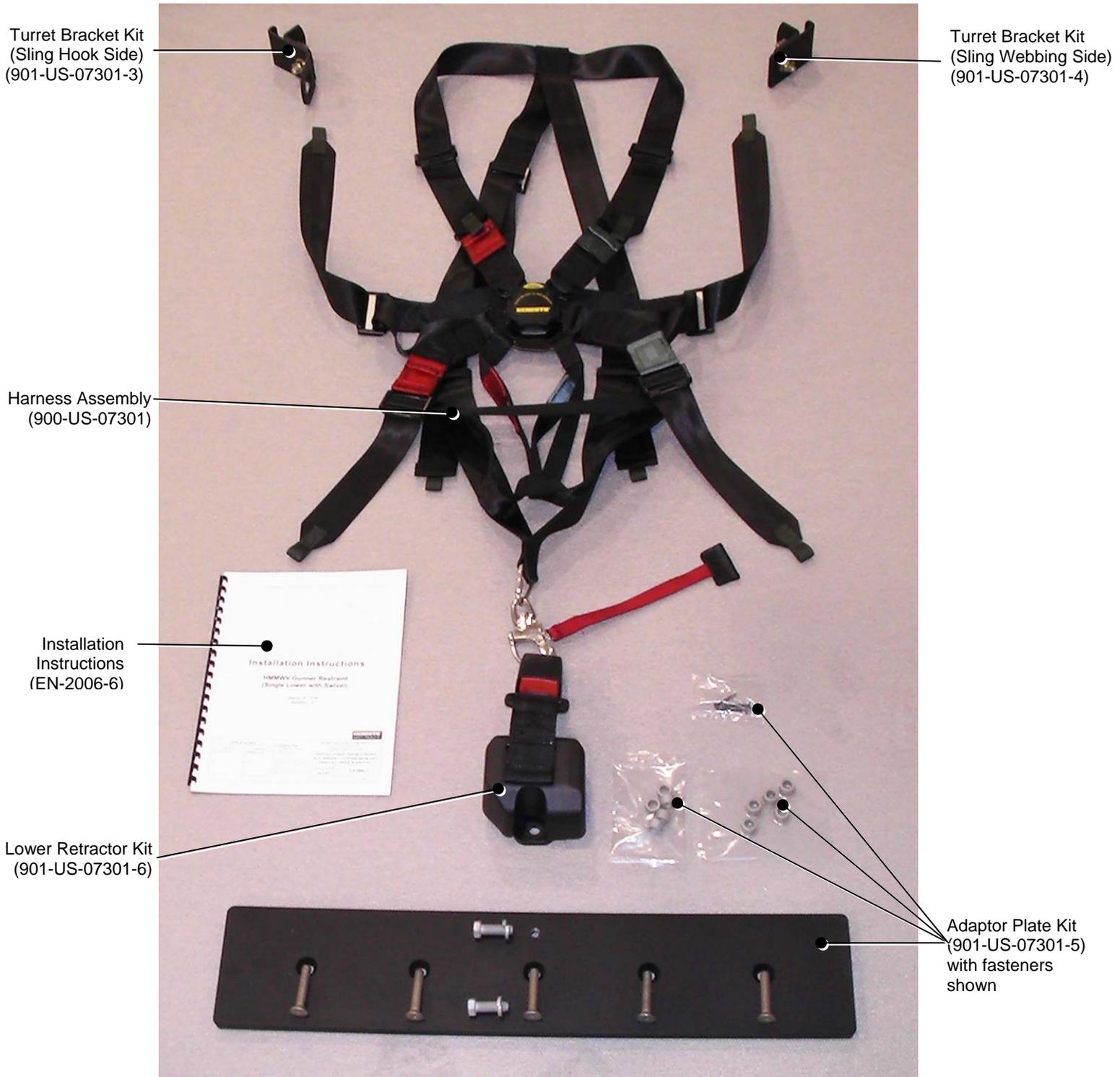
**1.1.3 Kit P/N: 901-US-07301-5 contains the following items:**

<b>Item No.</b>	<b>Part Number</b>	<b>Name</b>	<b>Qty</b>
1	USA 53	Plate, Retractor Mount, M1151	1
2	F-SCSK38X16-2	Bolt, Csk, 3/8-16x2	5
3	F-B716X14-1.0G8	Bolt, Hex, 7/16-14x1	2
4	F-WL716HS-G8	Washer, Lock, 7/16	2
5	5JK89	Rivet nut, flanged, steel, zinc plated, 3/8-16 thread, grip 0115 – 0.20”, body diameter 0.490”	5
6	DK-C0067-01-01	Spacer, 7/16” ID x .363” long, 18-8 stainless steel	5
7	F-SCSKST10X16-1.375	Screw, self tapping, zinc plated, self drilling, #10-16x1.375”, Philips, flat head	3

**1.1.4 Kit P/N: 901-US-07301-6 contains the following items:**

<b>Item No.</b>	<b>Part Number</b>	<b>Name</b>	<b>Qty</b>
1	A 6.17	Inertia Reel	1
2	A 6.9.01	Cover, Black	1
3	B 94	Plate	1
4	F-S8x32-.375	Screw, #8-32x3/8	3
5	F-W8	Washer, #8 Flat	3
6	900-US-07301-INERTIA REEL	Inertia Reel Webbing	1

# Kit P/N 902-US-07301



## Installation Instructions

### Step 1:

Lock gunner turret ring.

### Step 2:

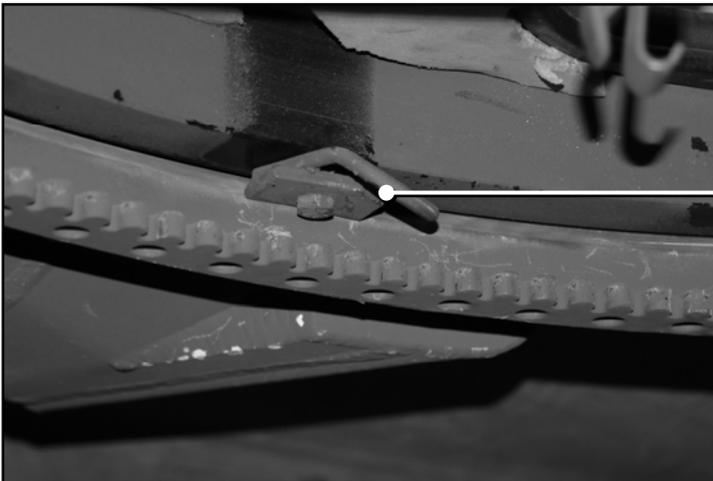
Open and secure gunner hatch.

### Step 3:

Remove existing gunner sling.

### Step 4:

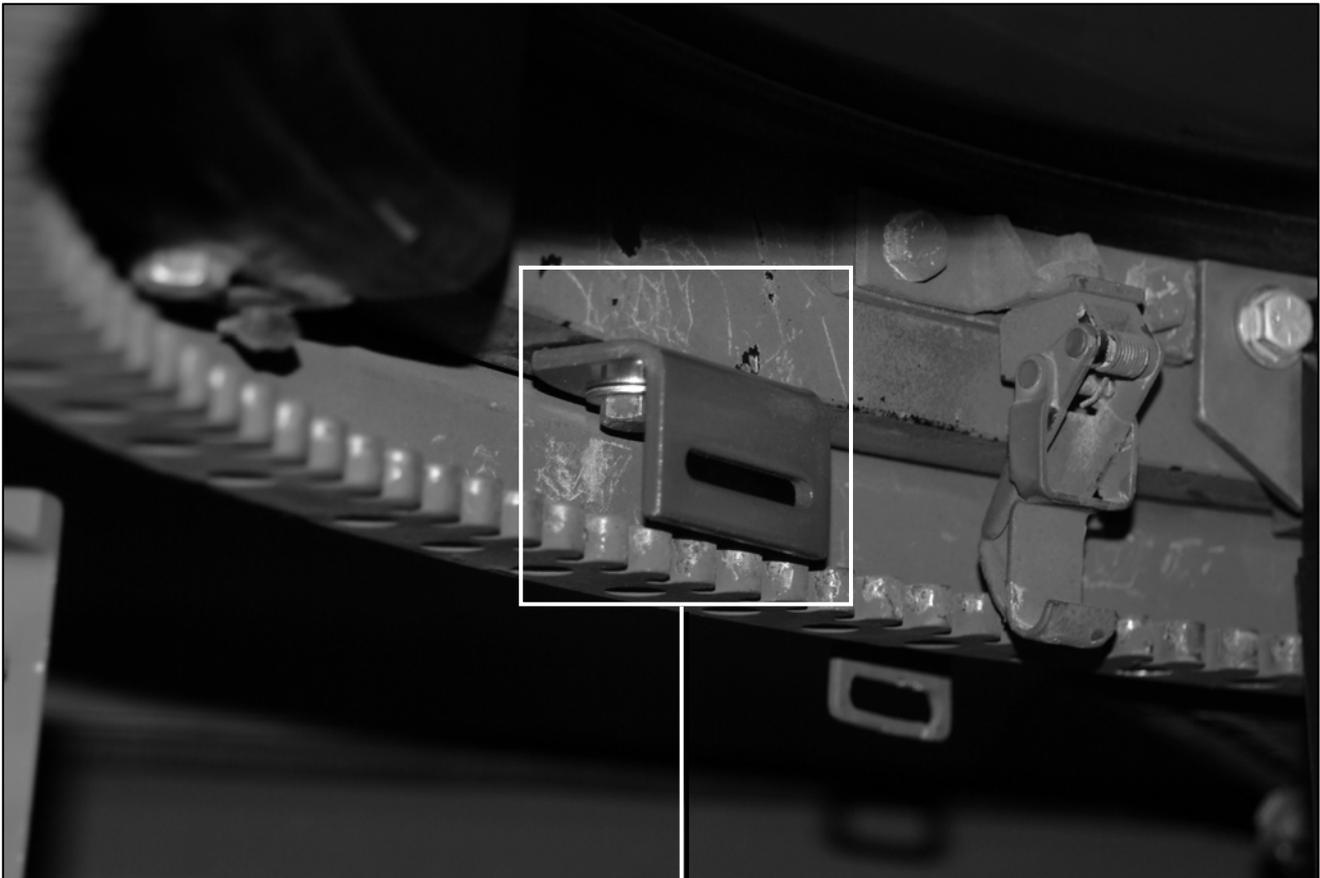
Remove bolt securing existing gunner sling-hook bracket from turret using 9/16" (14mm) ratcheting closed-end wrench (a.k.a. gear wrench) (save his bolt as it will be used for installation of the Turret Bracket hook side (p/n: 901-US-07301-3 (discard the bolt that comes with the kit)).



Existing Gunner Sling Hook Bracket  
(photos show two views of same bracket)

**Step 5:**

Remove bolt securing existing gunner sling slotted bracket from turret using 9/16" (14mm) gear wrench (save this bolt as it will be used for installation of Turret Bracket webbing side (p/n: 901-US-07301-4 (discard the bolt that comes with the kit)).



Existing slotted gunner sling bracket

**Step 6:**

Install Turret Bracket Kit Assemblies (p/n: 901-US-07301-3 hook side and 901-US-07301-4 webbing side) onto gunner turret with existing bolts removed from steps 4 and 5 using existing gunner sling bracket holes. Use thread-sealing compound (Loctite “blue”) on bolt threads. Center bracket assemblies and hold in position while tightening bolts. (Torque to 26 lb-ft  $\pm 10\%$ ).

**Turret Bracket Kit,  
Sling Hook Side  
(901-US-07301-3)**



**Turret Bracket Kit,  
Sling Webbing Side  
(901-US-07301-4)**



**Step 7:**

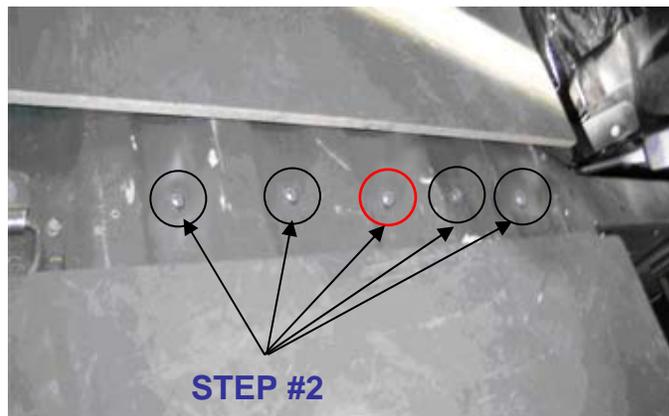
1. Ensure webbing slot on sling webbing bracket has no sharp edges or burrs. Use a file and/or coarse sandpaper to smooth sharp edges and burrs from webbing slot.
2. Reinstall existing mesh sling seat.

**Step 8:**

1. Remove wooden board (loosen A/C evaporator cover so board can be removed).
2. Identify and drill out the five (center) rivets in the area located above the cross member.



3. Using a 12.5mm drill bit, drill out ONLY the center hole of the five where the rivets were removed in step 2.
4. Install one (1) 3/8-16 Rivet-Nut Fastener in the 12.5mm hole from step 3.



5. Position the adaptor plate on the floor and secure with 3/8-16x2" counter-sink bolt, using the center hole in plate to the rivet-nut installed in step 4. NOTE: the adaptor plate shall be mounted on top of and in line with the B-beam.
6. The remaining four (4) rivet-nuts shall be installed one at a time to make sure that the pre-drilled counter-sink holes on the adaptor plate properly line up. This is to be accomplished by first mounting the plate; drilling ONLY ONE of the holes through the B-beam with a 12.5mm drill bit using the plate as a drill template and then removing the plate to install that rivet-nut. The plate is to be re-installed with a 3/8-16x2" counter-sink bolt in each of the rivet-nuts that have been installed at that time and selecting another of the holes to drill out. This process will be repeated until the remaining four (4) rivet-nuts are installed; each time removing and replacing the plate (in any sequence). NOTE: DO NOT DRILL MORE THAN ONE HOLE WITHOUT FIRST REMOVING THE PLATE TO INSTALL A RIVET-NUT.
7. Mark the position of the plate on the vehicle floor so that the markings may be transferred to the wooden board.
8. Place wooden board into position; install a few screws to locate board as required. Transfer markings from vehicle floor to wooden board and remove board accordingly.
9. Cut wooden board and discard center section.
10. Place 7/16" x .363" long spacers (qty 5) over each of the rivet-nuts.
11. Place wooden board into position and screw down board with existing screws. Secure the edge of the wooden board, alongside the adaptor plate where the upper ribbed floor meets the underside of the wooden board, using three (3) self-tapping screws on each side.



**Step 9:**

1. Mount Lower Retractor Assembly to topside of lower support plate (901-US-07301-5) using bolts (2) and washers (2) provided with 7/16" wrench. Orient webbing outlet slot toward front of vehicle.
2. Torque both 7/16" bolts (qty 2) for the lower Retractor Assembly to 26 lb-ft  $\pm$ 10%.

